

**A NEW SPECIES OF *CONASPIDIA* KONOW (HYMENOPTERA:
TENTHREDINIDAE) FROM INDIA AND REVIEW OF THE INDIAN SPECIES**

DAVID R. SMITH AND MALKIAT S. SAINI

(DRS) Systematic Entomology Laboratory, PSI, Agricultural Research Service, U.S. Department of Agriculture, c/o National Museum of Natural History, Smithsonian Institution, Washington, DC 20560-0168, U.S.A. (e-mail: dsmith@sel.barc.usda.gov); (MSS) Department of Zoology, Punjabi University, Patiala 147002, India (e-mail: saini20@glide.net.in)

Abstract.—*Conaspidia maculosa*, new species, is described from Sikkim, India. It is the fourth species of this Asian genus known from India, the other species being *C. dubiosa* Forsius, *C. fasciatipennis* Turner, and *C. sikkimensis* Konow. The new species belongs in the *scutellaris* group of *Conaspidia* and is separated from related species in that group and the other Indian species.

Key Words: India, *Conaspidia*, sawfly, Tenthredininae

Conaspidia Konow is an exclusively eastern and southeastern Asian genus of the subfamily Tenthredininae. It is known from eastern Russia and Japan, through China to northeastern India, Myanmar, and Vietnam. The first compilation of species with a key was that by Malaise (1945), who treated eight species. In the most recent treatment, Wie and Nie (1997) recognized five groups and keyed 18 species. Here we describe a fourth species from India, the others being *C. sikkimensis* Konow 1898 (type species), *C. fasciatipennis* Turner 1919, and *C. dubiosa* Forsius 1931, all recorded from Sikkim. The genus has been characterized by Malaise (1945) and Wie and Nie (1997).

***Conaspidia maculosa* Smith and Saini,
new species
(Figs. 1–4)**

Female.—Unknown.

Male.—Length, 10.0 mm. Antenna yellow with apical 3 segments black dorsally. Head and mouthparts reddish brown with black markings as follows: postocellar area,

large spot lateral to postocellar area; small spot lateral to lateral ocellus; stripes from clypeus to just above antennae between antenna and eye and between antennae, connected by a transverse stripe dorsal to antennal insertions. Thorax black with cervical sclerites laterally, dorsal half of pronotum, tegula, and parapterum reddish brown; small spots on mesonotal lateral lobe opposite mesoprescutum, on lateral margin, and on metanotum posterior to each cenchrus. Metanotum lateral to cenchri reddish brown. Abdomen orange with anterior margin of first segment, anterior margin of 2nd segment and segments 5 to apex black; apical tergum reddish brown at center. Legs orange yellow with hind tibia blackish. Forewing yellow orange with black macula at base of wing, black stripe from stigma to posterior margin at center of wing, and large black macula at apex (Fig. 3); base of costa reddish brown, all other veins and stigma black, with veins orange yellow in orange-yellow portion; hind wing uniformly clear.



Figs. 1-3. *Comaspidia maculosa*. 1, Dorsal view of head. 2, Antenna. 3, Forewing.

Antenna (Fig. 2) filiform, length $1.7\times$ head width; scape slightly less than $2\times$ longer than broad and longer than pedicel; pedicel slightly longer than broad; 3rd segment $1.3\times$ longer than 4th segment. Head impunctate, shining; and broad behind eyes in dorsal view (Fig. 1); eyes slightly converging below, with lower interocular distance

$1.1\times$ eye length. Clypeus with deep emargination about half its medial length, lateral lobes narrow and rounded; labrum about $2\times$ broader than long, anterior margin rounded; malar space nearly linear, less than half diameter of front ocellus; postocellar area about $1.2\times$ longer than broad; genal carina present, extending to top of head but

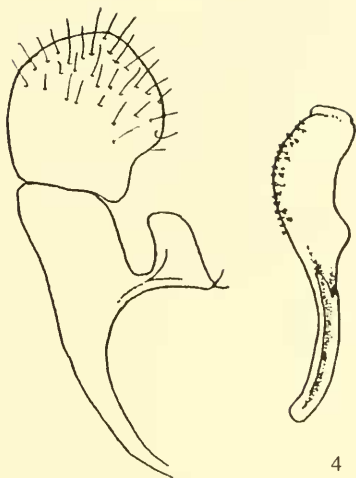


Fig. 4. Male genitalia of *Conaspidia maculosa*: ventral view of left half of genital capsule on left, lateral view of penis valve on right.

not including postocellar area. Mesoprescutum and mesonotal lateral lobes shining, with fine, widely spaced punctures; mesoscutellum in lateral view produced as a high conical projection, its height equal to length of posttergite, with deep, large punctures laterally and separating scutellum from posttergite; posttergite uniformly punctate. Punctures on mesepisternum large, close, irregular, extending to mesosternum; mesosternum not punctate, shining; mesosternal area rounded, without mesosternal postero-lateral thorn or projection. Hind basitarsus about $0.8\times$ length of following tarsal segments combined, about equal to following three segments. Inner tooth of tarsal claw longer than outer tooth and placed lateral to it on inner side. Abdomen shining, without surface sculpture. Hind wing without peripheral vein; cells M and Rs present; anal cell petiolate, with petiole length about equal to widest width of anal cell. Genitalia in Fig. 4.

Holotype.—♂, Chungthang, Sikkim, India, May 1995, 1800 m. M.S. Saini. De-

posited in the National Pusa Collections, Division of Entomology, India Agricultural Research Institute, New Delhi.

Etymology.—The species name is from the Latin *maculosus*, spotted, referring not only to the three maculae of the wings but extensive black markings on the head and body.

Discussion.—This species belongs to the *scutellaris* group of Wei and Nie (1997). The *scutellaris* group includes *C. guttata* (Matsumura 1912) from Japan, *C. kalopanicis* Xiao and Huang 1983 from China, *C. liui* Wei 1997 from China, *C. murotai* Togashi 1984 from Japan, and *C. scutellaris* Malaise 1945 from China and Myanmar. The *scutellaris* group is separated from other groups of *Conaspidia* by the strongly infuscate cross bands of the forewing with black maculae at the base and apex, the basal tooth of the left mandible small and obtuse, the scutellum strongly elevated, and the lance without a spine near the annuli (Wie and Nie 1997).

This new species will key to *C. liui* Wei from Hunan, China, in the key to species by Wie and Nie (1997), as it shares the following characters: short hind basitarsus, shorter than the following tarsal segments combined; third antennal segment longer than the fourth; hind wing of the male without a peripheral vein; head subparallel behind the eyes; maculation of the forewing; elevated mesoscutellum; small, obtuse basal tooth of the left mandible; punctures laterally on the mesoscutellum; dense, large punctures of the mesepisternum; impunctate mesosternum; and inner tooth of the tarsal claws longer than the outer tooth. The genitalia are also very similar to *C. liui* (see Wie and Nie 1997, fig. 37) though they are difficult to compare since they might not be drawn from exactly the same aspect. The new species differs from *C. liui* by the black apical segments of the antenna, black mesonotum, black mesopleuron, black anterior margins of the first and second abdominal terga, black apical segments of the abdomen, lower interocular distance slight-

ly longer than eye length, postocellar area longer than broad, and more slender, and curved penis valve.

Very few *Conaspidia* have the inner tooth longer than the outer tooth. This occurs only in *C. liti* and *C. latifasciata* Wei, the latter assigned to the *bicuspis* group.

The coloration of *C. maculosa* is very similar to *C. guttata*, but *C. guttata* has large, isolated punctures on the mesepisternum, mesosternum with dense small punctures, the inner tooth of the tarsal claws shorter than the outer tooth, and mesoscutellum lower and more convex and smoother without the large lateral and posterior punctures.

SPECIES IN INDIA

In India, *Conaspidia* is known only from Sikkim. *Conaspidia maculosa* is the only species with the basal, central, and apical maculae of the forewing. *Conaspidia sikkimensis* has only the apex of the forewing infuscated. *C. fasciatipennis* has only the central band and apical macula, and the forewing of *C. dubiosa* is uniformly yellowish. The species are included in the keys by Malaise (1945) and Wie and Nie (1997).

Conaspidia dubiosa.—Both sexes of this species were described from "Sikkim" by Forsius (1931). The forewing is uniformly yellowish, the third antennal segment is slightly shorter than the fourth segment, and the hind basitarsus is longer than the remaining tarsal segments combined. We have not seen additional specimens.

Conaspidia fasciatipennis.—This species was described from "Tong Lap, Haut Mekong" by Turner (1919). Only the female was treated by Turner (1919) and Malaise (1945); however, Wie and Nie (1997) indicated that both sexes are known. It was

recorded from "Sikkim" by Wie and Nie (1997). The forewing has the central dark band and apical macula but lacks the basal macula present in *C. maculosa*. We have not seen specimens from India.

Conaspidia sikkimensis.—Konow (1898) described this species from "Sikkim." He described only the female, and only the female was included by Malaise (1945), but Wie and Nie (1997) stated that both sexes are known. Only the apex of the forewing is black. The species is figured by Malaise (1945, pl. IIb). We have seen the following specimens from India: Sikkim, Gangtok, 2200 m, 12.V.1983 (2 ♀, 6 ♂).

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